

Francis P. Gasparro, Ph.D.

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Education Villanova University, B.S., Chemistry
Princeton University, Ph.D., Chemistry
Southern Connecticut State University Education Certification Program
Connecticut Certification in Chemistry

Appointments

Assistant Professor, William Paterson College of NJ
Research Staff Associate, Department of Biochemical Sciences, Princeton University
Assistant Professor, Department of Chemistry, Wellesley College
Lecturer/Research Staff, Department of Biochemical Sciences, Princeton University
Assistant Professor, Department of Chemistry, Colgate University
Research Staff Associate, Department of Dermatology, Columbia University
Associate Research Scientist, Department of Dermatology, Columbia University
Associate Research Scientist, Department of Dermatology, Yale University
Research Scientist, Departments of Dermatology, Surgery, Yale University
Research Professor, Department of Dermatology, Thomas Jefferson University
Adjunct Research Professor, Department of Dermatology, Thomas Jefferson University
Chemistry teacher (with D-SAP), Westhill High School, Stamford CT
Chemistry teacher, Cheshire High School, Cheshire CT

Teaching Interests

1. Exciting students about chemistry
2. Developing high school appropriate laboratory experiments
3. Involving students in independent research
4. Implementing modern technology in education: computers, web pages

Thesis Title Intermolecular Interactions in Solution and Complex Formation:
I. Vapor-Solution Equilibria; II. NMR Solvent Effects

Books

1. Editor, Psoralen-DNA Photobiology, CRC Uniscience Volume, Volumes I & II, CRC Press (1988).
2. Extracorporeal Photochemotherapy, RG Landes Co, Medical Intelligence Unit (1994).
3. Editor, Sunscreen Photobiology, RG Landes Co, Medical Intelligence Unit (1997).

Patents

1. Biotinylated Psoralens (U.S. Patent No: 4,868,311; 9/19/89).
2. Selective Inhibition of Gene Expression by Photoactivatable Oligonucleotides (U.S. Patent No: 5,256,648; 10/26/93).
3. Inhibition of Smooth Muscle Cell Proliferation by Photoactivated 8-Methoxypsoralen (U.S. Patent No: 5,354,774; 10/11/94).
4. Immune system modulation using psoralens activated with visible light (US Patent No: 5,462,733; 10/31/95)
6. Cellular Vaccine and Methods of Use for the Treatment of Solid Tumor Malignancies (U.S. Patent No: 5,820,872; 10/13/98).
7. Specific immune system modulation (US Patent No: 6,355,238; 3/12/02)

PUBLICATIONS

I. Original Research Articles

1. O'Driscoll K & Gasparro FP. Copolymerization. *J Macromol Sci A1*: 643-650 (1967).
2. Kuntz ID, Johnston MD, Gasparro FP & Taylor RP. Molecular interactions and the Benesi-Hildebrand equation. *J Am Chem Soc* 90: 4778-4782 (1968).
3. Kuntz ID, Johnston MD & Gasparro FP. Nuclear magnetic resonance solvent effects and molecular interactions II. A comparison of dipolar, hydrogen-bonding and charge transfer effects. *J Am Chem Soc* 91: 5717-5725 (1969).
4. Gasparro FP & Kochevar IE. Investigation of protriptylene photoproducts which cause cell membrane disruption. *Photochem Photobiol* 35: 351-356 (1982).
5. Gasparro FP, Berger CL & Edelson, RL. Effect of monochromatic UVA light and 8-methoxypsoralen on human lymphocyte response to mitogen. *Photodermatol* 1: 10-17 (1984).
6. Gasparro FP, Saffran WA, Cantor CR & Edelson RL. Wavelength dependence for AMT crosslinking of pBR322 DNA. *Photochem Photobiol* 40: 215-219 (1984).
7. Berger CL, Gasparro FP, Welsh J, Cantor CR, Dervan P, Grant S & Edelson RL. Comparison of synthetic and 8-methoxypsoralen in the inhibition of lymphocyte proliferation. *Ann NY Acad Sci* 454: 80-90 (1985).
8. Gasparro FP, Bagel J & Edelson RL. HPLC Analysis of 8-MOP photoadducts in calf thymus DNA, poly(dAdT.dAdT), poly(dA.dT) and poly(dT). *Photochem Photobiol* 42: 98-101 (1985).
9. Santella RM, Dharmaraja N, Gasparro FP & Edelson RL. Monoclonal antibodies that recognize 8-MOP modified DNA. *Nucl Acids Res* 13: 2533-2544 (1985).
10. Armstrong RB, Whitman GB, Gasparro FP & Leach EE. Potential hazards in phototherapy with ultraviolet radiation arising from variation in dose required to produce erythema. *J Am Acad Dermatol* 13: 772-777 (1985).
11. Gasparro FP. UVB-induced photoproducts of para-aminobenzoic acid: *Photodermatol* 2: 151-157 (1985).
12. Gasparro FP & Fresco JR. UV-induced 8,8-adenine dehydrodimer formation. *Nucl Acids Res* 14: 4239-4251 (1986).
13. Gasparro FP, Yemul SS, Knobler RM & Edelson, RL. Receptor-Mediated Phototoxicity. Synthesis of a photoactivatable psoralen derivative conjugated to Insulin. *Biochem Biophys Res Comm* 141: 502-509 (1986).
14. Edelson RL, Berger CL, Gasparro FP et al. Treatment of Cutaneous T Cell Lymphoma by Extracorporeal Photochemotherapy - Preliminary Results. *New Engl J Med* 316: 297-303 (1987).
15. Gasparro FP, Knobler RM, Weingold DH, Yemul SS & Edelson RL. Photoactivation of a Psoralen derivative conjugated to insulin. *Ann NY Acad Sci* 507: 339-340 (1987).

16. Gasparro FP, Battista J, Song J & Edelson RL. Rapid and sensitive analysis of 8-methoxypsoralen in plasma. J Invest Dermatol 90: 234-236 (1988).
17. Gasparro FP, Knobler RM, Saffran WA & Edelson RL. Photochemistry of Gilvocarcin: An Anti-tumor Antibiotic. Chem-Biol Interactions 67: 267-274 (1988).
18. Saffran WA, Welsh J, Gasparro FP, Knobler RM, Cantor CR & Edelson RL. Preparation and Characterization of a Biotinylated Psoralen. Nucl Acids Res 16: 7221-7231 (1988).
19. Miolo G, Stefanidis M, Santella RM, Dall'Acqua F & Gasparro FP. 6,4,4'-Trimethylangelicin photoadduct formation in DNA: production and characterization of a specific monoclonal antibody. J Photochem and Photobiol 3: 101-112 (1989).
20. Yang XY, Gasparro FP, DeLeo VA & Santella RM. 8-Methoxypsoralen-DNA photoadducts in patients treated with 8-methoxypsoralen and ultraviolet A light. J Invest Dermatol 92: 59-63 (1989).
21. Heald PW, Perez MI & Gasparro FP. Dosage guidelines: extracorporeal photochemotherapy (photopheresis). Arch Dermatol 126: 1369 (1990).
22. Gasparro FP, Dall'Amico R, O'Malley M & Edelson RL. Cell membrane DNA: a new target for psoralen photoadduct formation. Photochem Photobiol 52: 315-321 (1990). (Rapid communication)
23. Tokura Y, Yagi J, Edelson RL & Gasparro FP. Inhibitory effect of 8-MOP plus UVA on IL-1 production by murine epidermal keratinocytes. Photochem Photobiol 53:517-523 (1991).
24. Gasparro FP & Edelson RL. Photoactivatable antisense DNA: Suppression of ampicillin resistance in normally resistant E. coli. Antisense Research & Development 1: 117-140 (1991).
25. Tokura Y, Edelson RL & Gasparro FP. Formation and removal of 8-MOP-DNA photoadducts in keratinocytes: Effects of calcium and retinoids. J Invest Dermatol 96: 942-949 (1991).
26. Bevilacqua PM, Edelson RL & Gasparro FP. HPLC analysis of 8-methoxypsoralen monoadducts and crosslinks in lymphocytes and keratinocytes. J Invest Dermatol 97: 151-155 (1991).
27. Maso MJ, AM Ruszowski, Bauerle J, DeLeo VA & Gasparro FP. Celery phytophotodermatitis in a chef. Arch Dermatol 127: 912-913 (1991).
28. Baoyoun Y, Gasparro FP, Bevilacqua PM & Santella RM. Quantitation of plasma levels of 8-methoxypsoralen by competitive ELISA. J Invest Dermatol 97: 1001-1004 (1991).
29. Perez M, Yamane Y, John L, Gasparro FP & Edelson R. DNA associated with the cell membrane is involved in the inhibition of skin rejection response induced by infusions of photodamaged alloreactive cells that mediate rejection of skin allograft. Photochem Photobiol 55 :839-49 (1992).
30. Tokura Y, Edelson RL & Gasparro FP. Retinoid augmentation of bioactive interleukin-1 products in murine keratinocytes. Br J Dermatol 126:485-495 (1992).
31. Heald P, Rook A, Perez MI, Wintroub B, Knobler R, Jegasothy B, Gasparro F, Berger C & Edelson R. Treatment of erythrodermic CTCL with photopheresis. J Am Acad Dermatol 27: 427-433 (1992).
32. Oroskar AA, Gasparro FP & Peak MJ. Relaxation of supercoiled DNA by aminomethyltrimethyl-psoralen and UV photons: action spectrum. Photochem Photobiol 57: 648-654 (1993).

33. Rousset S, Nocentini S, Santella R, Gasparro F & Moustacchi E. Immunological probing of induction and repair of 8-methoxypsoralen photoadducts in DNA from Fanconi anemia and normal human fibroblasts: quantitative analysis by electron microscopy. J Photochem Photobiol B17: 27-34 (1993).
34. Gasparro FP, Gattolin P, Olack G, Deckelbaum LI & Sumpio BE. Visible excitation of 8-MOP: HPLC quantitation of monoadducts and crosslinks. Photochem Photobiol 57: 1007-1010 (1993).
35. Olack GA, Gattolin P & Gasparro FP. Improved HPLC analysis of 8-methoxypsoralen monoadducts and crosslinks in polynucleotide, DNA and cellular systems: Analysis of split-dose protocols. Photochem Photobiol 57: 941-949 (1993).
36. Sumpio DE, Phan SM, Gasparro FP & Deckelbaum LI. Control of smooth muscle proliferation by psoralen photochemotherapy. J Vasc Surg 17: 1010-1018 (1993).
37. Havre PA, Gunther EJ, Gasparro FP & Glazer PM. Targeted mutagenesis of DNA using triple helix forming oligonucleotides linked to psoralen. Proc Natl Acad Sci (USA) 90: 7879-7883 (1993).
38. Gasparro FP, Malane MS, Maxwell VM & Tigelaar RE. The treatment of mastocytoma cells with 8-methoxypsoralen and long wavelength ultraviolet radiation enhances cellular immunogenicity: Preliminary results. Photochem Photobiol 58: 682-688 (1993).
39. Tokura Y, Edelson RL & Gasparro FP. Modulation of 8-methoxypsoralen-DNA photoadduct formation by cell differentiation, mitogenic stimulation and phorbol ester exposure in murine T lymphocytes. Photochem Photobiol 58: 822-826 (1993).
40. Gasparro FP, Havre PA, Olack GA, Gunther EJ & Glazer PM. Site-specific targeting of psoralen photoadducts with a triple helix-forming oligonucleotide: Characterization of psoralen monoadduct and crosslink formation. Nucl Acids Res 22: 2845-2852 (1994)
41. Schmitt I, Maxwell VM, Olack GO, Chimenti S, Edelson RL & Gasparro FP. The specific effects of 8-methoxypsoralen photoadducts on cell survival: HPLC analysis of monoadduct and crosslink formation in cells exposed to split-dose treatment. J Photochem Photobiol B22: 17-21 (1994).
42. Oroskar A, Olack G, Peak MJ & Gasparro FP. 4'-Aminomethyl-4,5',8-trimethylpsoralen Photochemistry. Photoadduct dependence on concentration and UVA dose in poly(dA-dT) and calf thymus DNA. Photochem Photobiol 60: 567-573 (1994).
43. Sumpio BE, Li G, Deckelbaum LI & Gasparro FP. Selective inhibition of smooth muscle cell proliferation by visible light activated psoralen. Circulation Research 75: 208-213 (1994).
44. Spaedy TJ, March KL, Wilensky RL, Aita M, Gasparro FP, Gradus-Pizlo I, Mehdi K & Hathaway DR: The combination of 8-methoxypsoralen and ultraviolet A light inhibit smooth muscle cell proliferation after angioplasty. Circulation (submitted).
45. Gunther EJ, Yeasky T, Gasparro FP & Glazer PM. Mutagenesis by 8-methoxypsoralen and 5-methylangelicin photoadducts in mouse fibroblasts: Mutations at crosslinkable sites by monoadducts as well as crosslinks. Cancer Research 55: 1283-1288 (1995).

46. Schmitt IM, Moor ACE, Chimenti S, Beijersbergen van Henegouwen GM, Edelson RL & Gasparro FP. Increased surface expression of class I MHC molecules on non-tumorigenic cells derived from the xenogenization of tumorigenic P815 mastocytoma cells with 8-methoxypsoralen and long wavelength ultraviolet radiation. Tissue Antigens 46: 45-49 (1995).
47. Moor ACE, Schmitt IM, Beijersbergen van Henegouwen GM, Chimenti S, Edelson RL & Gasparro FP. Treatment of murine lymphoma cells with 8-MOP and UVA enhances MHC class I synthesis. J. Photochem Photobiol B 29: 193-198 (1995).
48. Gasparro FP. The effect of DNA tertiary structure on 4'-aminomethyl-4,5',8-trimethylpsoralen intercalation and photoadduct formation (submitted).
49. Bolognia JL, Freije L, Amici L, Dellostritto J & Gasparro FP. Rectal suppositories of 8-methoxypsoralen produce less side effects than the oral formulation. J Am Acad Dermatol 000-000
50. Amici L & Gasparro FP. 5-Methoxypsoralen photochemistry: Conversion of monoadducts to crosslinks. Photodermatol Photomed Photoimmunol 11: 135-139 (1995).
51. Gunther EJ, Havre PA, Gasparro FP & Glazer PM. Targeted mutagenesis of mouse genomic DNA in vitro mediated by triple helix formation. Photochem Photobiol 63: 207-212 (1996)
52. Vowels BR, Yoo EK & Gasparro FP. Kinetic analysis of apoptosis induction in human cells UVA and 8-MOP. Photochem Photobiol 63: 572-576 (1996).
53. Park J, Amici L & Gasparro FP. Strand dependence for 8-MOP photoadduct formation in complementary oligonucleotides. Photodermatol Photomed Photoimmunol 11: 102-106 (1995).
54. Van Iperen HP, Brun BM, Caffieri S, Dall'Acqua F, Gasparro FP & Beijersbergen van Henegouwen GMJ. The lack of efficacy of 4,6,4'-trimethylangelicin to induce immune suppression in an animal model for photopheresis: a comparison with 8-methoxypsoralen. Photochem Photobiol 63: 577-52 (1996).
55. Yoo EK, Rook AH, Elenitsas R, Gasparro FP & Vowels BR. Apoptosis Induction by Photochemotherapy: Relevance to anti-tumor therapy. J Invest Dermatol 107: 235-242 (1996).
56. Bernstein EF, Gasparro FP, Brown DB, Takeuchi T & Uitto J. 8-Methoxypsoralen and ultraviolet A radiation activate the human elastin promoter in transgenic mice: in vivo and in vitro evidence for gene induction. Photochem Photobiol 64: 369-374 (1996).
57. Wang XM, Madison-McNiff J, Klump V, Asgari M & Gasparro FP. An unexpected spectrum in p53 mutations from squamous cell carcinomas in patients treated with PUVA. Photochem Photobiol 66: 294-299 (1997) [Rapid Communication].
58. Uitto J, Brown DB, Gasparro FP & Bernstein EF. Molecular aspects of photoaging. Eur J Dermatol 7: 210-214 (1997).
59. Donath P, Bethea D, Amici L, DeLeo K, Wang XM, Battista J, Knobler RM, Gasparro FP. Low and irreproducible methoxsalen levels in patients receiving photochemotherapy. Arch Dermatol 135:604-606 (1999).

60. Brown DB, Peritz AE, Mitchell DL, Chiarello S, Uitto J and Gasparro FP. Common Fluorescent Sunlamps Are An Inappropriate Substitute for Sunlight. Photochem Photobiol 77: 340-344 (2000)..
61. Brown DB, Peritz AE, Uitto J, Gasparro FP. Ultraviolet-filtering properties of commonly used tissue cell culture plasticware. Photodermatol Photoimmunol Photomed 17:126-129 (2001)
62. Jost M, Gasparro FP, Jensen PJ, Rodeck U. Keratinocyte apoptosis induced by ultraviolet B radiation and CD95 ligation -- differential protection through epidermal growth factor receptor activation and Bcl-x(L) expression. J Invest Dermatol 116:860-866 (2001).
63. Hadshiew IM, Eller MS, Gasparro FP, Gilchrest BA. Stimulation of melanogenesis by DNA oligonucleotides: effect of size, sequence and 5' phosphorylation. J Dermatol Sci 25:127-138 (2001).
64. Bernstein EF, Kong SK, Brown DB, Kwak BC, Takeuchi T, Gasparro FP, Uitto J. The nitroxide Tempol affords protection against ultraviolet radiation in a transgenic murine fibroblast culture model of cutaneous photoaging. Exp Dermatol 10:55-61(2001).
65. Nakano H, Gasparro FP, Uitto J. UVA-340 as energy source, mimicking natural sunlight, activates the transcription factor AP-1 in cultured fibroblasts: evidence for involvement of protein kinase-C. Photochem Photobiol 74: 274-282 (2001)
66. Brown DB, Peritz AE, Uitto J, Gasparro FP. Ultraviolet-filtering properties of commonly used tissue cell culture plasticware. Photodermatol Photoimmunol Photomed. 17:126-9 (2001).
67. Jost M, Gasparro FP, Jensen PJ, Rodeck U. Keratinocyte apoptosis induced by ultraviolet B radiation and CD95 ligation - differential protection through epidermal growth factor receptor activation and Bcl-x(L) expression. J Invest Dermatol. 116:860-866 (2001).
68. Bernstein EF, Kong SK, Brown DB, Kwak BC, Takeuchi T, Gasparro FP, Uitto J. The nitroxide Tempol affords protection against ultraviolet radiation in a transgenic murine fibroblast culture model of cutaneous photoaging. Exp Dermatol. 10:55-61 (2001).
69. Lee DM, Gasparro FP, Wang XJ, Kopec C, DeLeo K, Sumpio BE. Photochemotherapy of vascular cells with 8-methoxypsoralen and visible light: differential effects on endothelial and smooth muscle cells. Photodermatol Photoimmunol Photomed 18 :244-252 (2002).
70. El-Domyati M, Attia S, Saleh F, Brown D, Birk DE, Gasparro FP, AhmadH, Uitto J. Intrinsic aging vs. photoaging: a comparative histopathological, immunohistochemical, and ultrastructural study of skin . Exp Dermatol 11:398-405 (2002).

II. Chapters, Reviews, Editorials etc

1. Gasparro, FP. An interesting and inexpensive solubility product experiment for general chemistry. J Chem Ed 53: 98 (1976).

2. Gasparro FP & Kolodny NH. NMR determination of the barrier to rotation in N,N-dimethylacetamide. A physical chemistry experiment. *J Chem Ed* 54: 389-395 (1976).
3. Berger CL, Edelson RL, Gasparro FP & Harber LC. Skin-associated lymphoid tissues and photodiseases, theoretical considerations. In *Clinical Photoimmunology* (eds. Krueger J and Daynes R) CRC Press. Vol II, 167-182 (1983).
4. Gasparro FP, Song J, Knobler RM & Edelson RL. Quantitation of psoralen photoadducts in DNA isolated from lymphocytes treated with 8-methoxypsoralen and ultraviolet A light (Extracorporeal Photopheresis). In *Current Problems in Dermatology* 15: 67-84 (1986).
5. Gasparro FP, Chan G & Edelson RL. Phototherapy and Photopharmacology. *Yale J Biol Med* 58: 519-534 (1985).
6. Santella RM, Gasparro FP & Edelson RL. Quantification of methoxsalen-DNA adducts with specific antibodies. In *Carcinogenicity of Alkylating Cytostatic Drugs* IARC Science Publications 78:127-139 (1986).
7. Santella RM, Gasparro FP & Ling-Ling H. Quantitation of carcinogen-DNA adducts with monoclonal antibodies (*Progress in Experimental Tumor Research*).
8. Bayley H, Gasparro FP & Edelson RL. Light Activated Drugs. *Trends in Pharmaceutical Sciences* 8: 138-143 (1987).
9. Gasparro FP. Psoralen-DNA Interactions. In *Psoralen-DNA Photobiology* (ed. FP Gasparro) CRC Press, vol I, Boca Raton (1988).
10. Gasparro FP. Immunological assay of 8-MOP photoadducts. *J Photochem Photobiol B2*: 286-288 (1988).
11. Gasparro FP & Santella RM. Immunoassay of DNA Damage. *Photochem Photobiol* 48: 321-328 (1988).
12. Santella RM, Yang XY, DeLeo VA & Gasparro FP. Detection and quantification of 8-methoxypsoralen-DNA adducts. In *DNA Damaging Agents in Humans* IARC Science Publications (eds. H Bartsch, K Hemminki & K O'Neill) Lyon 89: 333-340 (1988).
13. Gasparro FP. PABA: friend or foe? *Photodermatol* 3: 61-63 (1986) (an invited editorial).
14. Gasparro FP, Weingold D, Simmons E, Goldminz D & Edelson RL. Quantification of 8-MOP photoadducts in lymphocytes. In *Photobiology - The Science and Its Application* (ed. E Riklis) Plenum Press 951-962 (1991).
15. Gasparro FP, Bevilacqua PM, Goldminz D & Edelson RL. Repair of 8-MOP Photoadducts in Human Lymphocytes. In *DNA Damage and Repair in Human Cells* (eds. BM Sutherland & AD Woodhead) Plenum Press (1990) 137-154.
16. Gasparro FP, Dall'Amico R, Goldminz D, Simmons E & Weingold D. Molecular Aspects of Photopheresis. *Yale J Biol Med* 62: 579-593 (1989).

17. Gasparro FP. 8-MOP Photochemotherapy: Perspectives and Prospects. SPIE Institute on Photodynamic Therapy, Vol IS6: 195-204 (1990).
18. Gasparro FP. An action spectrum for the elicitation of erythema in skin persistently sensitized by photobound 8-methoxypsoralen. J Invest Dermatol 96: 799 (1991) (letter)
19. Malane M & Gasparro FP. T cell molecular targets. Ann NY Acad Sci 666: 354-371 (1991).
20. Gasparro FP. Sunscreens - A Photochemical perspective. In Photobiology - The Science and Its Application (ed. E Riklis) Plenum Pres 951-62 (1991).
21. Taylor A & Gasparro FP. Extracorporeal photochemotherapy for CTCL and other diseases. Sem in Hematol (eds. Jaffe & Deeg) 29:132-41 (1992).
22. Gasparro FP. The molecular basis of UV-induced mutagenicity of sunscreens. FEBS 336: 184-185 (1993) (commentary).
23. Gasparro FP. Mood Indigo. The Sciences. July/August (1993) page 47 (letter).
24. Gasparro FP. Novel approaches to tailoring psoralen use to phototherapeutic need. Current Opinion in Dermatology 2: 167-172 (1995). Invited review
25. Gasparro FP. Extracorporeal Photochemotherapy. In Photoimmunology Update (eds. J Krutman & C Elms) (1995).
26. Gasparro FP. 8-Methoxypsoralen molecular biology. In CRC Handbook of Photochemistry (ed. P-S Song) (1995).
27. Schmitt IM, Chimenti S & Gasparro FP. Psoralen-protein photochemistry - the forgotten field. J Photochem Photobiol B: Biol 27: 101-107 (1995). Invited review
28. Gasparro FP, Felli A & Schmitt IM. Psoralen photobiology: The relationship between DNA damage, chromatin structure, transcription and immunogenic effects in >Risk and Progression Factors in Carcinogenesis= (eds., HK Müller-Hermelink, H-H Neumann, W Dekant) Recent Results in Cancer Research 143: 101-127 (1997).
29. Moor ACE & Gasparro FP. Biochemical Aspects of Psoralen Photochemotherapy. Clinics in Dermatology 14: 353-365 (1996). Invited review
30. Schmitt IM, DeLeo KD, Wang XM & Gasparro FP. Photobiology of Psoralens (ed. Honigsmann H) (1996).
31. Gasparro FP. Psoralen Photobiology - Recent Advances. Photochem Photobiol 63: 553-557 (1996). Invited review
32. Gasparro FP, Liao B, Foley PJ, Wang XM & Madison McNiff J. Psoralen Photochemotherapy, Clinical Efficacy and Photomutagenicity: The Role of Molecular Epidemiology in Minimizing Risks. Environ Mol Mutagen 31: 105-112 (1998). Invited review
33. Gasparro FP, p53 in Dermatology, Archives of Dermatology 133: 1029-1032 (1998). Invited editorial

34. Gasparro FP, Foley PJ & Bethea BM. Psoralens entry for new edition of the Encyclopedia of Molecular Biology, John Wiley & Sons, NY NY, 1999.
 35. Gasparro FP. Photobiology 101. J Invest Dermatol 110:183, 1998
 36. Gasparro FP, Liao B, Foley PJ, Wang XM, McNiff JM. Psoralen photochemotherapy, clinical efficacy, and photomutagenicity: the role of molecular epidemiology in minimizing risks. Environ Mol Mutagen 31:105-112, 1998.
 37. Gasparro FP. p53 in dermatology. Arch Dermatol 134:1029-1032, 1998.
 38. Gasparro FP, Mitchnick M, Nash JF. A review of sunscreen safety and efficacy. Photochem Photobiol 68:243-256, 1998.
 39. Bethea D, Fullmer B, Syed S, Seltzer G, Tiano J, Rischko C, Gillespie L, Brown D, Gasparro FP. Psoralen photobiology and photochemotherapy: 50 years of science and medicine. J Dermatol Sci 19:78-88, 1999.
 40. Gasparro FP, Berwick M. Re: Sunscreen use, wearing clothes, and number of nevi in 6- to 7-year-old European children. J Natl Cancer Inst 91:1078-1080, 1999.
 41. Gasparro FP, Berwick M. Re: Sunscreen use, wearing clothes, and number of nevi in 6- to 7-year-old European children. J Natl Cancer Inst 91:1078-1080, 1999
 42. Gasparro FP. p53, p54, PUVA, and counting. J Am Acad Dermatol 41(5 Pt 1): 800-801, 1999.
 43. Peritz AE, Gasparro FP. Psoriasis, PUVA, and skin cancer--molecular epidemiology: the curious question of T-->A transversions. J Invest Dermatol Symp Proc 4:11-16, 1999
 44. Gasparro FP. Sunscreens, skin photobiology, and skin cancer: the need for UVA protection and evaluation of efficacy. Environ Health Perspect 108 Suppl 1:71-78, 2000.
 45. Gasparro FP. PUVA improvements will come from molecular biology. Photodermatol Photoimmunol Photomed 16:83-84, 2000.
 46. Gasparro FP. Photodermatology: progress, problems and prospects. Eur J Dermatol;10:250-254, 2000.
 47. Gasparro FP, Brown DB. Photobiology 102: UV sources and dosimetry - the proper use and measurement of "photons as a reagent". J Invest Dermatol 114:613-615 2000.
 48. Gasparro FP. The role of PUVA in the treatment of psoriasis. Photobiology issues related to skin cancer incidence. Am J Clin Dermatol. 1:337-348, 2000.
 49. Gasparro FP et al. Sun Protective Agents in Fitzpatrick's 'Dermatology in General Medicine' (6th ed) 2003
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INVITED PRESENTATIONS

1983

1. "Action-Spectra for Psoralen-DNA Crosslinking"
University of Padua.

1985

1. "8-MOP Photobiology and Photochemotherapy"
Albert Einstein College of Medicine.
2. "Wavelength Dependence for Psoralen Crosslinking"
Curie Institute (Paris).
3. "Wavelength Dependence for Psoralen Crosslinking"
University of Vienna.

1986

1. "Immunoassay for the detection of 8-MOP Photoadducts"
Round table "Determination of DNA Lesions" European Society for Photobiology.
2. Visiting Scientist, September 1986 - University of Austria.

1987

1. "Immunoassay of DNA Damage"
DNA Repair Symposium, American Society for Photobiology.
2. "Extracorporeal Photochemotherapy of CTCL"
SPiE Symposium: New Directions in Photodynamic Therapy.
3. "Opportunities and Pitfalls - Detection of 8-MOP Photoadducts"
University Medical and Dental College, Newark, New Jersey.

1988

1. "Quantification of 8-MOP Photoadducts in Lymphocyte"
Symposium 10th International Congress of Photobiology.
2. "Sunscreens - A Photochemical Perspective"
Symposium 10th International Congress of Photobiology.
3. "Effects of 8-MOP and UVA on Lymphocytes"
Workshop: Correlation of In vitro and in vivo Effects. American Society for Photobiology.
4. "8-MOP-DNA Photobiology"
Photomedicine Lab, Harvard University.
5. "Photopheresis - Clinical Results and Basis for Response"
Pediatrics, University of Padua.
6. "8-MOP/UVA Photochemotherapy"
Pharmaceutical Sciences, University of Padua.

1989

1. "Photoactivatable Antisense DNA"
Psoralen Symposium: American Society for Photobiology.
2. "Psoralen Photobiology - New Aspects: Photoactivatable Antisense DNA"
Pharmaceutical Sciences, University of Padua.
3. "Extracorporeal Photochemotherapy with 8-MOP and UVA"
Cancer Center, Northwestern University.
4. "Repair of 8-MOP Photoadducts in Human Lymphocytes"
Symposium: DNA Damage and Repair in Human Tissue, Brookhaven National Laboratory
5. "Photopheresis - Survey of Clinical Results"
Department of Dermatology, University of Pavia.

1990

1. "Psoralen Photochemotherapy - Perspective and Prospects"
SPIE Symposium: Future Directions and Applications of Photodynamic Therapy.
2. "Extracorporeal Photochemotherapy: A Molecular Mechanism"
Department of Dermatology, University of Oregon Health Sciences.

1991

1. "Photoactivatable Antisense DNA"
Division of Medical Research, Argonne National Laboratory.
2. "Photoactivatable Antisense DNA"
Symposium: American Society for Photobiology.
3. "Extracorporeal Photochemotherapy - Cell Death vs. Immune Effects"
Division of Oncology: Hilton Head Hospital.
4. "PUVA: Tricks of the Trade"
Department of Dermatology, State University of New York, Valhalla.

1992

1. "8-MOP/UVA Extracorporeal Photochemotherapy - Mechanism of Action"
Photomedicine Lab, Harvard University.
2. "Photopheresis - Molecular Aspects: Cell Death vs. Immune Stimulation"
Hilton Head Hospital Symposium on Photopheresis.
3. "Extracorporeal Photochemotherapy - Molecular Mechanism Underlying Clinical Response"
Cancer and Blood Diseases - Medical College of Wisconsin.
4. "Photoactivatable Antisense DNA and Other Antisense Strategies"
Evan & Marion Helfaer Lectureship, Medical College of Wisconsin.
5. "Sunscreens - An Overview"
Symposium: American Society for Photobiology.
6. "8-MOP Photochemotherapy"
Department of Dermatology, Columbia Presbyterian Medical Center.

1993

1. "8-Methoxypsoralen Photochemotherapy"
Department of Dermatology, University of Pennsylvania.
2. "New Aspect of Psoralen Photochemotherapy"
Symposium: DERM2000 International Meeting, Vienna Austria.
3. "The Role of Psoralen Monoadducts and Crosslinks in Cytotoxicity"
Symposium: American Society for Photobiology.
4. "Novel Aspects of Psoralen Photobiology & Photoimmunology"
New York Blood Center.

1994

1. "Non-cytotoxic Effects of Chemotherapeutic Agents"
Cancer Immunobiology Laboratory, Hilton Head Hospital.
2. "Sunscreen Round Table"
Chair, ASP Annual Meeting

1995

1. "The Role of p53 in Photochemotherapy" (Photomedicine Society, February)
New Orleans, LA
2. "Responses in Photochemotherapy Patients Result from the Concerted Effects of Transcription Factor Induction and Adduct Repair?"
(Keystone Symposium, April).

3. "Psoralen Photobiology"

Department of Dermatology (Thomas Jefferson University)

3. "Psoralen Photobiology - Are the Mutagenic and Immunogenic Effects Related"

('Sonderforschungsbereich', University of Wurzburg, May 1995)

4. "What is Photobiology" (Chair, Workshop for Congressional Science Aides, Media etc.)

1995 ASP Meeting, June.

5. "The Consequences of Psoralen Photochemistry in Mammalian Cells" (Chair, Symposium)

1995 ASP Meeting, June

1996

1. "Apoptosis and Photochemotherapy" (12th International Congress of Photobiology, Vienna Austria September).

2. "The Role of Apoptosis in the Response of Patients to Photopheresis" (Molecular Medicine Seminar Series, Thomas Jefferson University, October).

1997

1. "Photomutagenicity - Psoralen as an Example" (Annual Meeting of the Environmental Mutagen Society, Minneapolis, April 21).

2. "Phototherapy - Basic Principles" (Bioptron Seminar, NY, April 30)

3. "Phototherapy for the Prevention of Restenosis" (Annual Meeting of the European Society for Photobiology, Stresa Italy, September 12)

4. "Unexpected p53 Mutation Spectrum in PUVA SCC" (October 14, Harvard University, Department of Dermatology)

5. "Targeted Photochemistry in Oligonucleotides of Defined Sequences" (October 15, Boston University, Department of Dermatology)

1998

1. "Variations in 8-MOP Plasma Levels" (Hawaiian Dermatology Seminar, Hawaii, January 30)

2. "UV Exposure and Skin Cancer - Consensus and Controversy" (American Academy of Dermatology, Orlando FL, February 28)

3. "Sunburn as a Surrogate Marker of Later Biologic Events" Session Chair at NIH Workshop on Risks and Benefits of Exposure to Ultraviolet Radiation and Tanning, Bethesda MD, September 16-18.

1999

1. "Principles of Cutaneous Photobiology" (American Academy of Dermatology, New Orleans LA, March 19).

2. "Sunscreens: Basic Properties, Assessment of UVB and UVA Protective Factors" (American Academy of Dermatology, New Orleans LA, March 19).

3. "Psoralen Photobiology - Clinical Implications of the Science" (Advances in the Biology and Treatment of the Skin, Rutgers University, June 24)

4. "Skin Cancer Action Spectra - known and need to be known" (27th Annual meeting of the American Society for Photobiology, Washington DC July 13)

2000

1. "Principles of Cutaneous Photobiology" (American Academy of Dermatology, Chicago IL, March 3).

2. "Photons as a reagent" Symposium Speaker International Congress on Photobiology, SF CA, July 5)

3. "p53 Mutations in Skin Cancers from psoriasis patients treated with phototherapy" U Cincinnati Nov 16)

OTHER ABSTRACTS

1. Edelson RL, Berger CL, Gasparro FP, Lee K & Taylor J. Treatment of leukemic T-cell lymphoma with extracorporeally activated 8-methoxypsoralen, Clin Res 31: 467 A, (1983).
2. Bisaccia E, Berger CL, Murphy R, Gasparro FP, Patterson JAK & Edelson RL. Internalization of insulin by activated human T-cells, Clin Res 31: 467 A, (1983).
3. Heald P, Latkowski J, Gasparro FP, Yan SL & Edelson RL. Specific suppression of T-cell surface antigens with antisense oligodeoxynucleotides, J Invest Dermatol 94: 533 A (1990).

PROFESSIONAL SOCIETIES

13th Internal Congress on Photobiology (President)
American Society for Photobiology (President 1995-1998)
Society of Investigative Dermatology
American Chemical Society
American Association for the Advancement of Science

PROFESSIONAL DUTIES

President, American Society for Photobiology
President, Organizing Committee for Photobiology 2000 (13th International Congress of Photobiology)
Photobiology Section Editor, Journal of Investigative Dermatology (July 1997-2000)
Editorial Board, Photodermatology, Photomedicine and Photoimmunology

RESEARCH GRANTS

NIH FIRST Award (1/1/86-12/31/90): Characterization of Psoralen DNA Photoadducts.
NIH Skin Disease Research Center - Pilot/Feasibility Project (9/92-8/94)
(Mechanistic Aspects of Photophoresis, 4/97-3/98)
(Psoralen Photoadduct Mutagenesis) (7/96-6/99)
NIH (p53 Mutations in PUVA SCC) (pending)
(The role of p53 in the response to photophoresis, 10/99-9/00)

OTHER GRANTS

Proprietary information has been deleted.

OTHER TEACHING EXPERIENCE

Adjunct Professor of Chemistry, Quinnipiac University
Adjunct Professor of Chemistry, University of New Haven
Associate Professor, Fordham University
Assistant Professor, Colgate University
Lecturer, Department of Biological Sciences, Princeton Univ.
Summer Lecturer, Minority Program in Chemistry, Princeton University
Assistant Professor, Wellesley College
Summer Assistant Professor, Western New Mexico University
Assistant Professor, William Paterson State of New Jersey
Graduate student teaching assistant at Princeton University

COURSES TAUGHT

<u>Colgate University</u>	<u>Wellesley College</u>
<u>General Chemistry I & II</u>	<u>General Chemistry I and II</u>

<u>Biochemistry</u>	<u>Thermodynamics and Kinetics</u>
<u>Energy and Society</u>	<u>Molecular Spectroscopy in Biochemistry</u>
<u>The Science of Photobiology</u>	<u>Foundations of Chemical Research</u>
<u>The History of DNA</u>	<u>The Physical Chemistry of Water</u>

OTHER FACULTY EXPERIENCE

<u>Colgate University</u>	<u>Wellesley College</u>
<u>Chairman, Colgate II Board</u>	<u>Computer Users' Committee</u>
<u>Member, Search Comm. - Dean of the Faculty</u>	<u>Recorder Search Committee</u>
<u>University Council</u>	<u>Chemistry Department Search Committee</u>
<u>Advisor, Chemistry Club</u>	<u>Advisor, Photography Club</u>
<u>Advisor, Ecology House</u>	<u>Faculty Associate, Shafer Dormitory</u>

PARTICIPATION IN EDUCATIONAL MEETINGS

1. Participant in NSF Chautauqua-type course on the Instructional Uses of Computers in Education, November, 1973 - February, 1974.
2. Participant in ACS Short Course on Micro-processors and Minicomputers - Interfacing and Applications: Virginia Polytechnic Institute, December 8 - 13, 1974.
3. Participant in Workshop on Computers in Chemical Education at the ACS 7th Central Regional Meeting, Morgantown, West Virginia, May 28, 1972.

HONORS AND AWARDS

2000 ASP Photon Award
Faculty Research Award, Wellesley College.
Public Health Services Fellow (NIH), Princeton University.
Full Tuition Scholarship to Villanova University.

HOBBIES

Proprietary information has been deleted.